DETAILED ACTION

1. Claims 1-13 are pending

Priority

1. This application is a continuation of continuation of International Application No. PCT/JP04/18951, filed 12/17/2004.

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) of Japan Application No. JP2003-423297, filed on December 19, 2003. The certified copy has been filed on 06/08/2006.

3. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d) of Japan Application No. JP2003-423298, filed on December 19, 2003. The certified copy has been filed on 06/08/2006

Claim Objections

4. Claim 8 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from a previous multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claim 8 has not been further treated on the merits.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

A.) Claims 1 and 6/1 are rejected under 35 U.S.C. 102(b) as being anticipated by Sano (US Patent 5,214,454, hereinafter Sano).

As to Claim 1, Sano teaches an iris image pickup camera (**Sano, Fig. 1**) comprising:

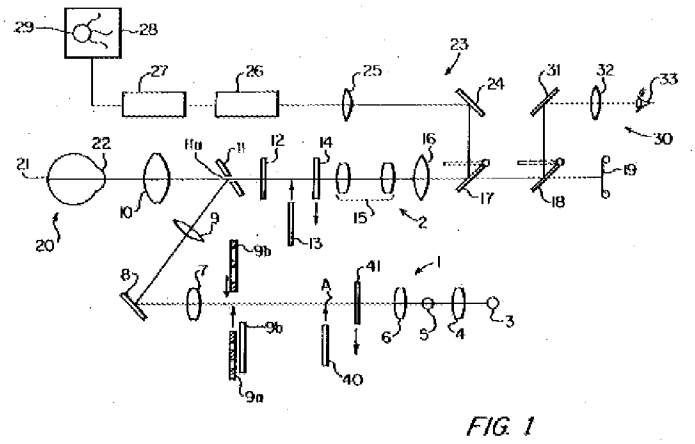


FIG. 1

Sano, US Patent 5,214,454, Fig 1

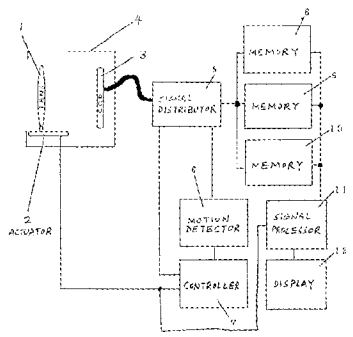
imaging optical means that has a common light axis in a region where an iris of interest is situated (**Sano, Fig. 1, Col.2, Lines 1-15, Col.4, Lines 9-15, Col. 30, 33, el 26, a CCD camera acquires an image of pupil, el 21**), and a plurality of branch light axes branched from the common light axis (**Sano,Fig.1, Col. 3, Lines 34-39, Col 4, Lines 1-10, Lines 19-26, the common light axis is branched by a path selecting mirror el 17, 18**), and has a plurality of focusing ranges different from one another on the common light axis for each of a plurality of branch light paths (**Sano, Fig.1, el 15, el 25, el 16, Col.4, Lines 1-26, the common light axis has a plurality of focusing lens and branch axis (17) with their own lens, which creates a different focusing ranges for each image means**), and imaging means for taking image data of a plurality of an iris of interest images formed through the plurality of branch light paths (**Sano, Fig.1, Col 4, Lines 1-18, Lines 29-38, images of the pupil is taken by a CCD camera and/or photographic based means based on the image formed though the plurality of branch light baths (path created by el 17)**).

As to Claim 6/1, Sano teaches the iris image pickup camera according to claim 1, wherein the imaging means has a plurality of imaging elements that are disposed on the plurality of branch light axes (**Sano, Fig. 1, Col.2, Lines 1-15, Col.4, Lines 9-15, Col. 30, 33, el 26, a CCD camera (imaging element) acquires an image of pupil, el 21, a person can view (imaging element) the pupil (el 33), and image is formed (imaging element) at el 29**), and take image data of a plurality of iris images formed through the plurality of branch light paths (**Sano, Fig. 1, Col.2, Lines 1-15, Col.4, Lines**

9-15, Col. 30, 33, el 26, for each branch light path, the paths created by (17, 18) etc, each path contains an image of a pupil (iris)).

B.) Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by Miwa et al. (U.S. PGPub # 2001/0015763 A1, hereinafter Miwa).

As to Claim 9, Miwa teaches a camera (**Miwa, Fig. 2**), comprising:



Miwa, PGPub # 2001/0015763 A1, Fig. 2

image acquisition means that acquires object images (**Miwa, Fig. 7, [0064], imaging acquisition means acquires images of an object when the targets of interest enter the field of view**) taken in a plurality of imaging modes having different focusing level characteristics to an object (**Miwa, Fig. 14, [0009], Lines 10-18, [0017] Lines 1-5, [0057], Lines 5-15, a plurality of imaging modes having three different focusing ranges on the object of interest**), and distance determination means that determines a distance to the object based on the difference in focusing level between the object

images taken in the plurality of imaging modes (**Miwa, [0065], Lines 1-13, [0054], Lines 7-16, [0061], Lines 1-6, [0064], Lines 14-20, the position (distance relative to the camera) of a object is estimated using the different focusing levels**).

C.) Claim 11 and 13/11 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (U.S. PGPub # 2002/0131622 A1, hereinafter Lee)

As to Claim 11, Lee teaches an image pickup camera (**Lee, Figure 7**), comprising: iris image acquisition means that acquires iris images (**Lee, Figure 7, Figure 12, [0002], Lines 1-10**) taken in a plurality of imaging modes having different focusing level characteristics to an iris (**Lee, [0024], Lines 9-15, [0043], Lines 1-10, the iris camera system handles the uncertainty of the user's position by continuously adjusting the focus and zoom to acquire an image of the iris suitable for authentication**), and lead means that leads a person to be imaged such that the iris is in at least one of the plurality of focusing ranges (**Lee, [0078], Lines 1-19, the iris camera system leads the user to be imaged such that the iris is suitable for authentication by indicating to the user when the user is at a proper focus range using a series of indicator lights (e.g. green being at appropriate range)**), each of which is corresponding to each of the focusing level characteristics of the plurality of imaging modes, based on the difference in focusing level between the iris images acquired in the plurality of imaging modes (**Lee, [0078], Lines 1-19, [0079], Lines 1-12**).

As to Claim 13/11, Lee teaches the iris image pickup camera according to claim 11, wherein the lead means leads the person to be imaged using at least one of display and voice (**Lee, [0014], Lines 1-15, uses a display (red, green, yellow light indicators) to indicated to the user to move closer or away from the iris camera**).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

A.) Claims 3/1, 4/3/1, 5/3/1, and 7/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano in view of Stoner (US Patent 6,318,635, hereinafter Stoner).

As to Claim 3, while Sano teaches the iris image pickup camera according to claim 1, however, Sano doesn't explicitly teach wherein the imaging optical means has a junction of the branch light axes where the plurality of branch light axes join together, and the imaging means has an imaging element that takes image data of an iris image formed through the plurality of branch light paths in the junction of the branch light axes.

Stoner teaches wherein the imaging optical means has a junction of the branch light axes where the plurality of branch light axes join together (**Stoner, Fig. 6, El PR, Column 7, Lines 1-11, Column 10, Lines 37-50, each optical axis from the lens (L1-L4) are directed inwardly towards a geometric center axis, which allows each Lens (L1-L4) to form an image of the object onto a respective quadrant of the photo-sensor array**), and the imaging means has an imaging element that takes image data of an iris image formed through the plurality of branch light paths in the junction of the branch light axes (**Stoner, Fig. 6, El 48, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, for each branch light paths, the paths created by the lens (L1-L4), are focused on a portion of 2D photo-sensor array to created an image of the object of interest, the combination Stoner and Lee teaches an Iris**).

It would have been obvious to one of ordinary skilled in the art at the time of inventions to modify the iris image pickup camera of Sano with Stoner as applied to Claim 1 to include the subsystem of Fig. 6 of Stoner, to be inserted between sub components of Fig.1 el 25 and el 26 of Sano, to achieve the imaging optical means that is configured such that the plurality of focusing ranges are adjacent to each, and where the pupil (iris) is situated in all regions of the plurality of focusing ranges according to the teaching of Stoner. The combination of Sano and Stoner are analogous in the art of image based acquisition of objects, and Stoner addresses the same problem of auto focusing of an object. One of ordinary skilled in the art would have been motivated to combine the teachings of Stoner to the camera system of Sano as applied to Claim 1 in

order to use the iris image pickup camera of Sano as applied to Claim 1 and to capture images of the iris at the same field of view at four different focal ranges, in order to choose the image of the iris that is at the best focus of the set.

Further, the combination of the combination of Sano and Stoner collectively teach all of the claimed elements, the teaching of Stoner performs the same function in combination with Sano as taught individually in Stoner, and the results would be highly predictable (The focused image of an individual's iris that is of a suitable size for iris recognition).

As to Claim 4/3/1, the combination of Sano and Stoner teach the iris image pickup camera according to claim 3/1, comprising; shield means for selectively shielding the plurality of branch light paths (**Stoner, Fig.6, Column 6, Lines 57-66, Column 8, Lines 1-10, each lens array is separated (shielded) from one another using partitions (vertical and horizontal) to reduce the crosstalk amongst the light from different lens assemblies**) .

As to Claim 5/3/1, the combination of Sano and Stoner teach the iris image pickup camera according to claim 3/1, comprising; a mirror which is held in a manner that a direction of a reflective surface can be changed (**Sano, Column 4, Lines 1-25, el 17, and el 18 are selecting mirror which can change where the image path is directed such that the optical path can be directed to either a CCD, photographic means, and/or a viewing (eye piece) lens**), and forms an iris image through one of the

plurality of branch light paths by changing the direction of the reflective surface (**Sano, Fig. 1, Column 4, Lines 1-25, and Lines 26-28, by changing the direction of el 17, and el 18 a selection is made to where an image of pupil, (iris), is to be displayed, the optical path can be projected to an eye piece, a photographic element, or and CCD**).

As to Claim 7/1, while Sano teaches the iris image pickup camera according to claim 1, however, Sano doesn't explicitly teach wherein the imaging means has an imaging element that takes image data of the plurality of iris images formed through the plurality of branch light paths, and the imaging optical means is configured such that the plurality of iris images are projected to different regions in the imaging element..

Stoner teaches wherein the imaging means has an imaging element that takes image data of the plurality of iris images formed through the plurality of branch light paths (**Stoner, Fig. 6, Column 5, Lines 13-15, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, the photo-sensor array (plurality of imaging elements) acquires a plurality of images of an object, one for each branch optical light path from the lens (L1 - L4), and each optical light path is arranged onto a region of the photo-sensor**), and the imaging optical means is configured such that the plurality of iris images are projected to different regions in the imaging element (**Stoner, Fig. 6, el 48, el PR, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, for each branch optical (light) paths, the paths created by the lens (L1-L4), are mapped to a unique quadrant on the photo-**

sensor array as shown in Fig 10, and each quadrant contains an image of an object, the combination Stoner and Lee teaches an Iris).

It would have been obvious to one of ordinary skilled in the art at the time of inventions to modify the iris image pickup camera of Sano with Stoner as applied to Claim 1 to include the subsystem of Fig. 6 of Stoner, to be inserted between sub components of Fig.1 el 25 and el 26 of Sano, to achieve the imaging optical means that is configured such that the plurality of focusing ranges are adjacent to each, and where the pupil (iris) is situated in all regions of the plurality of focusing ranges according to the teaching of Stoner. The combination of Sano and Stoner are analogous in the art of image based acquisition of objects, and Stoner addresses the same problem of auto focusing of an object. One of ordinary skilled in the art would have been motivated to combine the teachings of Stoner to the camera system of Sano as applied to Claim 1 in order to use the iris image pickup camera of Sano as applied to Claim 1 and to capture images of the iris at the same field of view at four different focal ranges, in order to choose the image of the iris that is at the best focus of the set.

Further, the combination of the combination of Sano and Stoner collectively teach all of the claimed elements, the teaching of Stoner performs the same function in combination with Sano as taught individually in Stoner, and the results would be highly predictable (The focused image of an individual's iris that is of a suitable size for iris recognition).

B.) Claims 2, 3/2, 4/3/2, 5/3/2, 6/2, and 7/2 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Sano in view of Stoner and in further view of Lee.

As to Claim 2, while Sano teaches the iris image pickup camera according to claim 1, however, Sano doesn't explicitly teach wherein the imaging optical means is configured such that the plurality of focusing ranges are adjacent to each, and when the iris is situated in all regions of the plurality of focusing ranges, an iris image having a size suitable for iris authentication is obtained.

Stoner teaches wherein the imaging optical means is configured such that the plurality of focusing ranges are adjacent to each (**Stoner, Fig. 15, Column 2, Lines 29-44, Column 12, Lines 25-45, Column 8, Lines 10-20, and Column 14, Lines 1-15, each lens has a best focus range, each focus range is different, the focusing range is adjacent to each other, since the ranges overlap to create a continuous range up to several feet, this is seen in Fig. 15, where a range chart provides a comparison of field of view and range among the lens, where the focusing ranges (distance) is adjacent to one another**), and when the iris is situated in all regions of the plurality of focusing ranges (**Stoner, Column 2, Lines 18-28, for each focusing ranges (each lens) has an object, where the combination Stoner and Lee teach the object can be an iris, situated in an image for each focusing optic**), where the images collected at different focal lengths are used to identify that object (**Stoner, Column 1, Lines 11-15**).

. It would have been obvious to one of ordinary skilled in the art at the time of inventions to modify the iris image pickup camera of Sano with Stoner as applied to

Claim 1 to include the subsystem of Fig. 6 of Stoner, to be inserted between sub components of Fig.1 el 25 and el 26 of Sano, to achieve the imaging optical means that is configured such that the plurality of focusing ranges are adjacent to each, and where the pupil (iris) is situated in all regions of the plurality of focusing ranges according to the teaching of Stoner. The combination of Sano and Stoner are analogous in the art of image based acquisition of objects, and Stoner addresses the same problem of auto focusing of an object. One of ordinary skilled in the art would have been motivated to combine the teachings of Stoner to the camera system of Sano as applied to Claim 1 in order to use the iris image pickup camera of Sano as applied to Claim 1 and to capture images of the iris at the same field of view at four different focal ranges, in order to choose the image of the iris that is at the best focus of the set.

However, the combination of Sano and Stoner does not explicitly teaches an iris image having a size suitable for iris authentication is obtained.

Lee further teaches an iris focusing system which determines whether the image of a user's iris is appropriate for performing authentication based on the current focus and range (**Lee, [0024], Lines 1-15**). Lee acquires images of an iris for biometric recognition by adjusting the focus position of the iris recognition camera based on distance estimation between the camera and the user's eye, as described by Lee at paragraphs [0002], lines 1-9, and [0043], Lines 1-9. It would have been obvious to one of ordinary skilled in the art at the time of inventions to modify the iris image pickup camera of the combination of Sano and Stoner to include an additional step of determining whether the images obtained would be suitable in size for iris authentication

as required by the combination of Sano and Stoner according to the teaching of Lee. The combination of Sano and Stoner and Lee are analogous in the art of image based object identification and camera focusing, and Lee addresses the same problem of auto focusing of an iris. One of ordinary skilled in the art would have been motivated to combine the teachings of Lee to the camera system of the combination of Sano and Stoner in order to use the iris image pickup camera of the combination of Sano and Stoner and to capture images of the iris and determine whether the images would be suitable for recognition as described by Lee in order to enhance the accuracy and reliability of iris recognition. (**Lee, [0041], Lines 1-4**).

Further, the combination of the combination of Sano and Stoner and Lee collectively teach all of the claimed elements, the teaching of Lee performs the same function in combination with the combination of Sano and Stoner as taught individually in Lee, and the results would be highly predictable (The focused image of an individual's iris that is of a suitable size for iris recognition).

As to Claim 3/2, the combination of Sano, Stoner, and Lee teach the iris image pickup camera according to claim 1, wherein the imaging optical means has a junction of the branch light axes where the plurality of branch light axes join together (**Stoner, Fig. 6, El PR, Column 7, Lines 1-11, Column 10, Lines 37-50, each optical axis from the lens (L1-L4) are directed inwardly towards a geometric center axis, which allows each Lens (L1-L4) to form an image of the object onto a respective quadrant of the photo-sensor array**), and the imaging means has an imaging element that takes image data of an iris image formed through the plurality of branch

light paths in the junction of the branch light axes (**Stoner, Fig. 6, El 48, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, for each branch light paths, the paths created by the lens (L1-L4), are focused on a portion of 2D photo-sensor array to created an image of the object of interest, the combination Stoner and Lee teaches an Iris**).

As to Claim 4/3/2, the combination of Sano, Stoner, and Lee teach the iris image pickup camera according to claim 3/2, comprising; shield means for selectively shielding the plurality of branch light paths (**Stoner, Fig.6, Column 6, Lines 57-66, Column 8, Lines 1-10, each lens array is separated (shielded) from one another using partitions (vertical and horizontal) to reduce the crosstalk amongst the light from different lens assemblies**) .

As to Claim 5/3/2, the combination of Sano, Stoner, and Lee teach the iris image pickup camera according to claim 3/2, comprising; a mirror which is held in a manner that a direction of a reflective surface can be changed (**Sano, Column 4, Lines 1-25, el 17, and el 18 are selecting mirror which can change where the image path is directed such that the optical path can be directed to either a CCD, photographic means, and/or a viewing (eye piece) lens**), and forms an iris image through one of the plurality of branch light paths by changing the direction of the reflective surface (**Sano, Fig. 1, Column 4, Lines 1-25, and Lines 26-28, by changing the direction of el 17, and el 18 a selection is made to where an image of pupil, (iris), is to be displayed,**

the optical path can be projected to an eye piece, a photographic element, or and CCD).

As to Claim 6/2, the combination of Sano, Stoner, and Lee teach the iris image pickup camera according to claim 2, wherein the imaging means has a plurality of imaging elements that are disposed on the plurality of branch light axes (**Stoner, Fig. 6, Column 5, Lines 13-15, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, a photo-sensor array (plurality of imaging elements) acquires an image of all branch optical light paths from lens (L1 - L4), that is the optical light path is arranged (disposed) into regions onto the pixels of the photo-sensor**), and take image data of a plurality of iris images formed through the plurality of branch light paths (**Stoner, Fig. 6, el 48, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, for each branch light paths, the paths created by the lens (L1-L4), each quadrant contains an image of an object, the combination Stoner and Lee teaches an Iris, focused through a plurality of optical paths**).

As to Claim 7/2, the combination of Sano, Stoner, and Lee teach the iris image pickup camera according to claim 2, wherein the imaging means has an imaging element that takes image data of the plurality of iris images formed through the plurality of branch light paths (**Stoner, Fig. 6, Column 5, Lines 13-15, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, the photo-sensor array (plurality of imaging elements) acquires a plurality of images of an object, one for**

each branch optical light path from the lens (L1 - L4), and each optical light path is arranged onto a region of the photo-sensor), and the imaging optical means is configured such that the plurality of iris images are projected to different regions in the imaging element (**Stoner, Fig, 6, el 48, el PR, Column 7, Lines 1-11, Column 2, Lines 1-10 and Column 10, Lines 37-50, for each branch optical (light) paths, the paths created by the lens (L1-L4), are mapped to a unique quadrant on the photo-sensor array as shown in Fig 10, and each quadrant contains an image of an object, the combination Stoner and Lee teaches an Iris**).

C.) Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miwa in view of Sano.

As to Claim 10, Miwa teaches the camera according to claim 9, comprising; imaging optical means that has a common light axis in a region where the object is situated (**Miwa, Fig. 7, Fig. 8, Fig. 10, [0091], Lines 1-28, [0064], Lines 1-16, the light coming from the object is parallel (common) with the optical axis (common light axis)**), however, Miwa is silent to having a plurality of branch light axes branched from the common light axis, and has a plurality of focusing ranges different from one another on the common axis for each of branch light paths of the plurality of branch light axes, wherein the plurality of imaging modes are imaging modes in which an object image is formed through the plurality of branch light paths, so that the object image is taken.

Sano, however, teaches a plurality of branch light axes branched from the common light axis (**Sano**), and has a plurality of focusing ranges different from one

another on the common light axis for each of a plurality of branch light paths of the plurality of branch light axes (**Sano, Fig.1, el 15, el 25, el 16, Col.4, Lines 1-26, the common light axis has a plurality of focusing lens and branch axis (17) with their own lens, which creates a different focusing ranges for each image means**), wherein the plurality of imaging modes are imaging modes in which an object image is formed through the plurality of branch light paths, so that the object image is taken. (**Sano, Fig.1, Col 4, Lines 1-18, Lines 29-38, images of the pupil is taken by a CCD camera and/or photographic based means based on the image formed though the plurality of branch light baths (path created by el 17)**).

It would have been obvious to one of ordinary skilled in the art at the time of inventions to modify the camera of Miwa to include the optical system of Sano, by replacing the optical system, lens attached to an actuator, of Fig.1 of Miwa (el 1, 2) with an optical system composed of half mirrors and lens as taught by Sano, Fig.1 to create branch light axes which are branched from the common light axis to create a plurality of focusing ranges to acquire an image of an object as required by Miwa according to the teachings of Sano. Miwa and Stoner are analogous in the art of iris image acquisition and both acquire images at multiple focus ranges.

One of ordinary skilled in the art would have been motivated to combine the teachings of Sano to the camera system of Miwa in order to use camera of Miwa with multiple branch light axes branched from the common light axis to create several images of an iris with different focus ranges at that same field of view.

Further, Miwa and Sano teach all of the claimed elements, the teaching of Sano performs the same function in combination with Miwa as taught individually in Sano, and the results would be highly predictable (Several images of an object branched off from a common optical axis).

D.) Claims 12 and 13/12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Yoshinao (JP 2000-259817, US-Translation performed on 10/2/2009, hereinafter Yoshinao). Yoshinao is cited by applicant in IDS filed 06/08/2006.

As to Claim 12, while Lee teaches the iris image pickup camera according to claim 11, wherein the plurality of focusing ranges are adjacently displaced in a back and forth direction (**Lee, [0011], Lines 1-10, [0024], Lines 1-15, [0043], Lines 1-10, the iris image camera changes the focus level, e.g. back and forth, which changes the focus ranges, back and forth, which are inherently adjacent to one another**). While Lee teaches the directing the user to align their iris with the camera when a user is not in the focus range of the camera, the user is guided to approach (the lead means leads the person to be imaged to be closer to the device) or withdraw (the lead means leads the person to be imaged to be distanced from the device) from the camera system, the camera determines the range from the images using an infrared spot illuminated onto the face (**Lee, [0078], Lines 1-16**). Lee, however, is silent to when a focusing level of a **first** iris image taken in an imaging mode corresponding to a

focusing range on this side of *the relevant device*, which is an area where the iris is not within any of the plurality of focusing ranges is higher than a focusing level of a **second** iris image taken in an imaging mode corresponding to a focusing range at a back side, (this indicates that the person to be imaged is to close to device), and when the focusing level of the **second** iris image is higher than the focusing level of the first iris image, (this indicates that the person is to far from the device).

Yoshinao, however, teaches when a focusing level of a **first** iris image taken in an imaging mode corresponding to a focusing range on this side of *the relevant device*, which is an area where the iris is not within any of the plurality of focusing ranges is higher than a focusing level of a **second** iris image taken in an imaging mode corresponding to a focusing range at a back side (**Yoshinao, [0022], Lines 1-20, compares the focusing degree levels between the first images focus level and the next images focus level, these comparisons allow the system to determine if the object is too close or too distance from the camera**) the person too close to the camera system (**Yoshinao, [0023], Lines 1-5**), and when the focusing level of the **second** iris image is higher than the focusing level of the first iris image (**Yoshinao, [0022], Lines 1-20**) the person is to far from the camera system (**Yoshinao, [0023], Lines 1-5**).

It would have been obvious to one of ordinary skilled in the art at the time of inventions to modify the iris image pickup of Lee when the iris is not suitable for authentication to use images acquired with different focus ranges to determine whether the user should move towards or away from the iris image pickup as required by Lee

according to the teachings of Yoshinao. Lee and Yoshinao are analogous in the art of iris based camera focusing for iris recognition, and Yoshinao addresses the same problem, to determine when a user is a focus range that is optimal for iris recognition. One of ordinary skilled in the art would have been motivated to combine the teachings of Yoshinao to the iris image pickup of Lee in order to use iris image pickup of Lee to aid the user in determining a position relative to their iris and the camera to acquire an image suitable for iris authentication when the user is outside the authentication range (**Yoshinao, [0007], Lines 1-8**).

Further, Lee and Yoshinao teach all of the claimed elements, the teaching of Yoshinao performs the same function in combination with Lee as taught individually in Yoshinao, and the results would be highly predictable (The user would be guided to a position that allows the imaging of iris suitable for authentication).

As to Claim 13/12 the combination of Lee and Yoshinao teach the iris image pickup camera according to claim 12, wherein the lead means leads the person to be imaged using at least one of display and voice (**Lee, [0014], Lines 1-15, uses a display (red, green, yellow light indicators) to indicated to the user to move closer or away from the iris camera**).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fujieda, US Patent #7123751 B1

Hideshima, US Patent #5,270,924 A

Hill, US Patent #4,109,237 A

Hill, US Patent #4,620,318 A

Matsumoto et al., US Patent #6,327,375 B1

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Heidemann whose telephone number is (571)-270-5173. The examiner can normally be reached on Monday - Thursday/7:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on 571-272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Heidemann/ 10/14/2009
Examiner, Art Unit 2624

/Wenpeng Chen/
Primary Examiner, Art Unit 2624